

Product datasheet for **MR216128**

Jmjd7 (NM_001114637) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Jmjd7 (NM_001114637) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Jmjd7
Synonyms:	MGC106779
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR216128 representing NM_001114637 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGAGGCGGCTCTGGAGGCAGTTCGGAGGGCGTTGCAAGAGTTCCTGGCGGCGGCTCGCGACCTCA
ATGTACCTCGTGTGTGCCCTACCTGGATGAGCCCCAAGCCCACTCTGCTTCTACCGGGATTGGGTGTG
CCCCAACAGGCCCTGCATTATCCGAAATGCTCTGCAGCACTGGCCAGCCCTCCAGAAGTGGTCCCTGTCC
TACTTAAGAGCCACGGTGGGCTCCACGGAGGTGAGTGTGGCTGTGACTCCAGATGGTTATGCGGACGCGG
TGGGAGGGGACCGCTTTGTGATGCCTGTGAACCGCCCTGCCATAAGCCATGTACTGGATGTGTGGGA
AGGTGGGCGCCAGCACCCAGGAGTCTCTATGTGCAGAAACAGTGTCCAACCTGCCCACTGAGCTGCC
CAGCTTCTGTCTGACATTGAGTCCCATGTGCCCTGGGCTCTGAGTCACTGGGGAAGATGCCTGATGCCG
TGAACCTCTGGTGGGTGATGCATCTGCAGTGACATCCTTGACAAAGGACCACTATGAGAATCTGTACTG
TGTAGTCTCTGGCGAGAAACACTTCTTGTACATCCACCAGCGACCGGCCCTTCATCCCTTACAATCTC
TACACACCAGCAACCTACCAGCTGACTGAAGAGGGCACTTTTAGGGTGGTGGACGAGGAAGCCATGGAGA
AGGTACCCTGGATCCCACTGGACCCCTTGGCTCCAGACCTGACCCAGTACCCAGTTACAGCCAGGCACA
GGCCCTTCACTGCACAGTGGCGGCGGCGAGATGCTGTACCTGCCAGCTCTGTGGTCCACCATGTCCAG
CAGTCCCACGGCTGTATTGCTGTGAATTTCTGGTATGACATGGAGTATGACCTCAAGTACAGTTACTTTC
AACTGATGGACACCCTACCAGGGCCACAGGCCCTTGAC

ACGCGTACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR216128 representing NM_001114637
Red=Cloning site Green=Tags(s)

MAEAALEAVRRALQEFPAARDLNVPRVVPYLDEPPSPLCFYRDWVCPNRPCIIRNALQHPALQKWSLS
 YLRATVGSTEVSVAVTPDGYADAVRGDRFVMPAERRLPISHVLDVLEGRAHQHGVLYVQKQCSNLPTELP
 QLLSDIESHVPWASESLGKMPDAVNFWLGDASAVTSLHKDHYENLYCVVSGEKHFLHPPSDRPFIPYNL
 YTPATYQLTEEGTFRVVDDEEAMEKVPWIPLDPLAPDLTQYPSYSQAQALHCTVRAGEMLYLPALWFHHVQ
 QSHGCIAVNFWYDMEYDLKYSYFQLMDTLTRATGLD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9072_d01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001114637

ORF Size: 948 bp

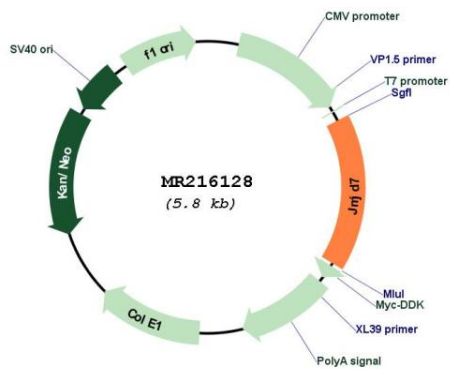
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	<u>NM_001114637.1, NP_001108109.1</u>
RefSeq Size:	1383 bp
RefSeq ORF:	951 bp
Locus ID:	433466
UniProt ID:	<u>P0C872</u>
Cytogenetics:	2
MW:	35.9 kDa
Gene Summary:	<p>Bifunctional enzyme that acts both as an endopeptidase and 2-oxoglutarate-dependent monooxygenase (PubMed:28847961) (By similarity). Endopeptidase that cleaves histones N-terminal tails at the carboxyl side of methylated arginine or lysine residues, to generate 'tailless nucleosomes', which may trigger transcription elongation (PubMed:28847961). Preferentially recognizes and cleaves monomethylated and dimethylated arginine residues of histones H2, H3 and H4. After initial cleavage, continues to digest histones tails via its aminopeptidase activity (PubMed:28847961). Additionally, may play a role in protein biosynthesis by modifying the translation machinery. Acts as Fe(2+) and 2-oxoglutarate-dependent monooxygenase, catalyzing (S)-stereospecific hydroxylation at C-3 of 'Lys-22' of DRG1 and 'Lys-21' of DRG2 translation factors (TRAFAC), promoting their interaction with ribonucleic acids (RNA) (By similarity).[UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for MR216128